

Submission of Microorganism Deposit Receipt

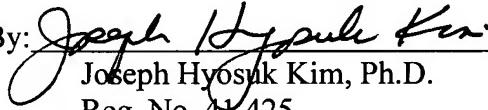
Applicants submit herewith the deposit receipts for *Escherichia coli* Top10F'-pBlueKS-/LTS63Y (KCTC 0648BP) and *Escherichia coli* Top10F'-pBlueKS-/LTΔ110/112 (KCTC 0649BP), submitted at the Korean Collection for Type Cultures on July 27, 1999 for both cultures. Further, Applicants hereby declare that subject to paragraph (b) of 37 CFR 1.808, all restrictions imposed by the depositor on the availability to the public of the deposited material will be irrevocably removed upon the granting of the patent.

The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 07-1853 during the pendency of prosecution of this application. A duplicate of this paper is enclosed for the Deposit Account, should it be needed.

Respectfully submitted,

SQUIRE, SANDERS & DEMPSEY L.L.P.

Dated: March 15, 2002

By:   
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Reg. No. 41,425

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**VERSION MARKED TO SHOW CHANGES MADE**

**In the Specification**

At page 1, line 4, add the following:

-- CROSS REFERENCE TO OTHER APPLICATIONS

The present application is filed under 35 U.S.C. 371, and is the U.S. national phase application of PCT/KR99/00555, filed on September 15, 1999. --

**In the Claims**

10. (Amended) A [process] method for preparing the detoxified and immunologically active protein [(mutant LT)] of claim 1 which comprises the steps of culturing a culture of recombinant microorganism transformed with an expression vector comprising a DNA encoding the [mutant LT] protein and isolating the [recombinant mutant LT] protein from the culture.

11. (Amended) The [process] method [for preparing the detoxified and immunologically active protein of] according to claim 10, wherein the recombinant microorganism is *Escherichia coli* Top10F'-pBlueKS-/LTS63Y(KCTC 0648BP) or *Escherichia coli* Top10F'-pBlueKS-/LTΔ110/112(KCTC 0649BP).

Please also add new claims 14-20.

14. (New) The protein of claim 1, wherein serine residue at position 63 is substituted with tyrosine.

15. (New) A nucleic acid encoding the protein of claim 14.

16. (New) A vector comprising the nucleic acid of claim 15.

17. (New) A host cell transformed with the vector of claim 16.

18. (New) The protein of claim 1, wherein glutamic acid residues at positions 110 and 112 are deleted.

19. (New) A nucleic acid encoding the protein of claim 18.

20. (New) A vector comprising the nucleic acid of claim 19.

SEQUENCE LISTING

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BUDAPEST TREATY ON THE INTERNATIONAL RECOGNITION OF THE DEPOSIT  
OF MICROORGANISMS FOR THE PURPOSE OF PATENT PROCEDURE

INTERNATIONAL FORM

**RECEIPT IN THE CASE OF AN ORIGINAL DEPOSIT**

issued pursuant to Rule 7.1

TO: Mogen Biotechnology Research Institute  
#341, Pujang-ri, Kusung-myeon, Yengin-si, Kyonggi-do 410-910,  
Republic of Korea

<b>I. IDENTIFICATION OF THE MICROORGANISM</b>	
Identification reference given by the DEPOSITOR:  <i>Escherichia coli</i> Top10F'-pBlueKS' / LTS63Y	Accession number given by the INTERNATIONAL DEPOSITORY AUTHORITY:  KCTC 0648BP
<b>II. SCIENTIFIC DESCRIPTION AND/OR PROPOSED TAXONOMIC DESIGNATION</b>	
<p>The microorganism identified under I above was accompanied by:</p> <p>[ <input checked="" type="checkbox"/> ] a scientific description  <input type="checkbox"/> a proposed taxonomic designation          (Mark with a cross where applicable)</p>	
<b>III. RECEIPT AND ACCEPTANCE</b>	
<p>This International Depository Authority accepts the microorganism identified under I above,          which was received by it on Jul 27 1999.</p>	
<b>IV. RECEIPT OF REQUEST FOR CONVERSION</b>	
<p>The microorganism identified under I above was received by this International Depository          Authority on _____ and a request to convert the original deposit to a deposit          under the Budapest Treaty was received by it on _____</p>	
<b>V. INTERNATIONAL DEPOSITORY AUTHORITY</b>	
Name: Korean Collection for Type Cultures  Address: Korea Research Institute of Bioscience and Biotechnology (KRIIBB) #32, Oun-dong, Yusong-ku, Taejon 305-333, Republic of Korea	Signature(s) of person(s) having the power to represent the International Depository Authority or authorized official(s):   BAE, Kyung Sook, Director Date: Aug 02 1999

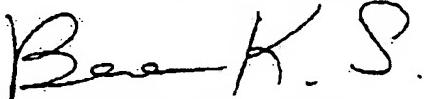
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Republic of Korea

<b>I. IDENTIFICATION OF THE MICROORGANISM</b>	
Identification reference given by the DEPOSITOR:	Accession number given by the INTERNATIONAL DEPOSITORY AUTHORITY:
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<b>V. INTERNATIONAL DEPOSITORY AUTHORITY</b>	
Name: Korean Collection for Type Cultures  Address: Korea Research Institute of Bioscience and Biotechnology (KRIIBB) #52, Oun-dong, Yusong-ku, Taejon 305-333, Republic of Korea	Signature(s) of person(s) having the power to represent the International Depository Authority or authorized official(s):   BAE, Kyung Sook, Director Date: Aug 02 1999